The impacts of earnings volatility, net income and comprehensive income on share Price: Evidence from Indonesia Stock Exchange

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ABSTRACT

This study aims to estimate and predict the effect of stock prices on profit volatility, net profit, and comprehensive income on the Indonesia Stock Exchange for the period 2014-2019. The study uses quantitative analysis with secondary data consisting of 98 banking companies on the Indonesia stock exchange from 2014 to 2019. The results prove that the share price has a significant effect on net income and comprehensive income but does not have a significant effect on profit volatility, so that net and comprehensive income have relevance to the share price and investors can make both variables in conducting further fundamental research. Previous studies measured the level of volatility of earnings, net income, and comprehensive income on the share price, but when trialing other approaches by causality, share prices affect net income and comprehensive income but not for profit volatility. In this study, however, the change includes detailed income variables due to Financial Accounting Standard No. 1, a shift in terms from profit and loss statements to systematic profit and loss statements.

Keywords:
Stock Price
Earnings Volatility
Net Income
Comprehensive Income

1. Introduction

Trend of stock price volatility on the financial market is the reason for the comparison of opinions about where the profitability of the industry and a high stock price level is still large and has an effect on the uncertainty of shareholder return. Many investors are likely to look at high-quality stocks so is a high opportunity to earn capital gains, although the risk is high (Nikmah & Sitohang, 2015). Investors tend to see stocks with high levels (Iqbal, Chaudry, & Iqbal, 2015; Rozak, 2015; Sutrisno, 2017; Nurliza, 2017). Many variables affect the stock price. This research is structured to test those variables: stock price / industrial value metrics affected by the benefit dimension are earnings fluctuations, net profits, detailed income at Indonesia stock exchange banks, updates to this research are in maximum income variables, as there have not been a complete income indicator in previous research.

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The importance of the formula for the profit estimate to the stock market valuation can be determined on the significance of normal value accounting for the financial instruments and profit measurement model relevance research (Handy, 2013; Hodder et al., 2006; Barth, Beaver, & Landsman, 2001; Antoniou et al., 2002). Some authors (e.g., Khan & Bradbury; 2016, Procházka, 2011; Francis & Schipper, 1999; Fiechter et al., 2017; Ota, 2001) investigated whether the basic features of the market are important to the interpretation of the change in stock prices. However the data on normal value profits does not impact the stock price substantially. The reality that earnings instability is profited and sales variance reflects risks not dependent upon net income. Standard in Financial Statements number 1 the wording has been changed from a declaration of benefit and loss to a complete statement of profit and loss. The detailed declaration of income contains other full income containing income posts and expenditures not included in the statement of income and loss. The postal jobs include surplus revaluation turnover, gains and losses within a given period, gains and losses in trades in foreign currencies, re-measurement income and losses and productive hedge pieces. These posts are more critical in terms of complete benefit and loss. In this basis it is very important to perform research into which the importance of financial statements can be improved by systematic income calculation at regular value.

2. Theoretical framework and hypothesis development

2.1 Efficient Market Theories

A good business, according to Fama (1970) is the situation where the bond prices state all the data. The share price only responds rapidly to the latest knowledge reflected in the adjustment in stock prices. Data by researching the relationship between asset prices and accounting data are the secret to calculating market efficiency. However what details can be used to take competitive economies into account? The three key types of effective market have been stated, (Fama, 2013; Fama, 1970) among other things: efficient market is small effective market is half solid and efficient market shape is sound.

2.2 Accounting's Information significance

Research to assess whether a value in a financial statement occurs between a value and an asset pricing on a stock exchange is an important relevance. Both valid and accurate financial reporting must be made. Financial statements are claimed to be essential for the prediction and affirmation of forecasts already implemented for the business decision. Income results have been said to be important as they contribute closely to industry importance (Barth et al., 2001; Hodder et al., 2006) in the financial statement. The importance for financial norm setting of the value-related literature’ is defined by the relevance of the study value in 3: a.Relative correlation studies (equivalent to the relationship between stock market valuation and alternate scale bottom line, b. Incremental correlation analyses (financial statements are helpful in describing the valuation of the stock market or its returns), c. Content research on marginal knowledge (accounting figures raise existing data information for investors).

2.3 Ohlson Valuation Model

It is a model of value significance intended to define the relationship between accounting principles and business value (Ohlson, 1995). Ohlson's methodology is the accounting model where the calculation model applies to the underlying principles of the financial data. The paradigm of Ohlson is a sound statistical method for assessing basic accounting factors-based markets, as well as other forms of data that may be applicable to forecasting business value. Ohlson's model is a straightforward one. The paradigm of Ohlson assumes investors are neutral to risk, transparency unbiased, comprehensive accounting, absence of asymmetry, that the tax rate faced by shareholders is insignificant (Heesameilita, 2012; Randy Kuswanto, Prima Aprilyani Rambe & Sri Ruwanti, 2016). The industrial value in the Ohlson model (1995) is reflected in stock price, as seen in the following equation:

\[ NP_t = NB_t + \alpha_1 LA_1 + LA_2 + \alpha_2 VL_t. \]

The above equation indicates the industrial importance (NPt) at the time t influences on earnings volatility (NBt), net income (LA1), comprehensive income (LA2) and other data (VLt) each multiplied by a constant (\( \alpha_1 \) and \( \alpha_2 \)). Thus can be derived for the value of the industry is as follows:

\[ NP_t = f (NB_t, LA_1, LA_2, VL_t). \]

Surprisingly, the value model (Feltham & Ohlson, 1995) was merely reduced but successfully removed the need to estimate dividends in the business value estimation by means of assessment outcomes that were even equal with the present value of all projected dividends.
2.4 Hypothesis Development

Volatility in earnings is the high turnover rate of the companies' income. Some researchers (e.g. Rowena & Hendra, 2017b; Bathala et al., 1994) explained the earnings volatility business risk proxy, from the dividend program, has an effect on the stock price since the decision has relevant details relating to the allocation of business profits and the output of the market. This data provides a response for investors, thus affecting the stock price in the market. Managers are required, by volatility profits, to monitor the price of industrial securities. Investors tend to maintain their shares, resulting in low stock sales (Rowena & Hendra, 2017b; Antoniou et al., 2002). Profit ups and downs will make it hard for the industry to attract foreign funding, because the industry is not usual, the higher the degree of profit fluctuations, such that investors' capital profits continue to be significant. Investors thus prefer to hold their shares for the coming term. There are also not many trades, so the number of stock prices is limited. Volatility of profits is a comparison of operating profit with overall industrial wealth (Shahid et al., 2015; Rowena & Hendra, 2017b; Jondri, & Rohmawati, 2017). The hypotheses in this analysis are as follows:

H1. Stock price has a significant positive effect on profit volatility.

The importance of accounting data will clarify the significance of business accounting data (Barth et al., 2001). Net sales is an accounting detail in the profit and loss financial statements that describes the industry's results for a span of one year. The market value of the industry is expressed at the price market of its stock. Net income is a risk-relevant dimension, expressed in the financial market stock price (Arouri et al., 2012). The net profits of Biddle and Choi (2006) rather than the sales fluctuations, influences the stock price. Determined in previous studies was the course of the relation between industrial income and stock prices. In compliance with the desires of each investor, the relationships can be positive or negative between manufacturing wages and stock prices. Sourced from the description, so the hypotheses in this research are:

H2. Stock price has a significant positive effect on net profit.

Comprehensive sales in the profit and loss financial statements describes the performance of the industry throughout one period of financial statements. Financial Accounting Standard Number. 1 explained that there has been a change in terminology from profit and loss statements to comprehensive profit and loss statements. The actual statement of income contains other detailed revenue and expenditures not included in the statement of revenue. The postal posts include surplus revaluation turnover, income and losses over time, foreign exchange trade profits, benefits and losses as a result of capital asset reassessments and successful hedging sections. The postal posts include the postal posts. Data on the industry's results becomes useful because they are expressed in the price transition. Comprehensive revenue reveals the threats to the industry's success. The importance of the uncertainties that may justify the degree of market return on securities must be detailed revenues. The more risk the more price the stock. Sourced from the description, so the hypotheses in this research are:

H3. Stock price has a significant positive effect on comprehensive profit.

3. Research Methods

3.1 Types of Research

This analysis uses a quantitative approach that creates information and uses evidence to convince theories. The information used in this analysis is secondary and does not offer information for example by means of other data or records, directly to data collectors (Rusdiyanto, Agustia, Soetedjo, & Septiarini, 2020; Juanamasta et al., 2019; Rusdiyanto, Hidayat, et al., 2020; Prabowo, Rochmatulaili, Rusdiyanto, & Sulistyowati, 2020; Syafii et al., 2020; Jannah et al., 2020).

3.2 Population and Research Samples

In this research the nonprobabilistic approach of sampling is demonstrated by purposeful judgement. In a population, purposeful sampling uses certain parameters to collect reliable information. Financial statements banking are taken from Indonesia Stock Exchange and www.yahoofinance.com, to calculate earnings volatility, net income, and comprehensive income.

3.3 Variable Operational Definitions

In this research, the value of accounting data in business was measured by the use of four types of variables construct a regression model. The variables used have been analyzed:

1) Independent Variables
Independent variables used in this study are the projected industry value with the stock market price (NPt) on April 1. Price or worth of capital market shares at a given time resulting from demand and supply by market actors is called the stock market price (Rusdiyanto & Narsa, 2019).

2) Dependent Variables

1. Earnings volatility means the degree of volatility of business income, describing profits is difficult to forecast and is much harder to predict at high volatility (Antoniou et al., 2002). The ups and downs in industry sales will obstruct the industry's access to investors' funds. The higher the volatility of the industry's earnings, which ensures that buyers expect to make massive capital returns at a profit hit optimum rate. Investors therefore prefer for a long time to hold their shares. Volatility of earnings is the contrast between assets and the overall wealth of business, with the following formulas:

\[
\text{Earnings Volatility} = \frac{\text{Operating Profit}}{\text{Total Assets}}
\]

2. Net income is one of the corporate benefit and loss accounting data that outlines the business's results over a particular accounting cycle. Net income is the dimension of a risk, on the contrary the value of profit has the relevance of risk reflected in market stock price (Rusdiyanto & Narsa, 2019). Earning/the income is related to stock price rather than net income. A valuable dimension of risk as stated in the share price is net income.

3. Financial Accounting Standard Number. 1 there was a change in terminology from a profit and loss statement to a comprehensive profit and loss statement. This report covers supplementary compensation containing income and expenditures not included in the income disclosure. These include revaluation surplus turnover, income and losses in the interim, foreign-exchange trade earnings and losses, profits and losses as a result of re-measured financial asset. These posts make comprehensive profit and loss more relevant. Comprehensive income describes predictions from investors towards the stock price (Rusdiyanto & Narsa, 2019; Ilmiyono, 2017).

3.4 Types and Data Sources

The research used data from Indonesia Stock Exchange banking industry, variable data to calculate net income, earnings volatility and comprehensive income.

3.5 Analysis Model

This research measures the impact of independent variables on dependent variables using a multiple linear regression analysis with pls SEM application:

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>SP</th>
<th>EV</th>
<th>NI</th>
<th>CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Analysis And Discussion

4.1 Research Results Description

In order to give an understanding of the variables investigated, the properties of the testing data should be deciphered using informative analyzes before the theory is checked. The distribution of the analysis data used is often subject to data normality checking. Data from 126 out of 29 companies in the Indonesian Stock Exchange which fulfill previously laid down criteria are obtained from the sample results collection. The statistical knowledge from the survey is descriptive:

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Minimal</th>
<th>Maximal</th>
<th>Average</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP</td>
<td>98</td>
<td>71</td>
<td>993.00</td>
<td>336.31</td>
<td>248.48</td>
</tr>
<tr>
<td>EV</td>
<td>98</td>
<td>0.08</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>NI</td>
<td>98</td>
<td>22,178</td>
<td>78,759,737,169.00</td>
<td>2,655,955,838.41</td>
<td>12,186,293,293.80</td>
</tr>
<tr>
<td>CI</td>
<td>98</td>
<td>14,237</td>
<td>644,687,783,000.00</td>
<td>7,138,285,466.15</td>
<td>57,016,923,535.66</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>98</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 1
Variable Description

Table 2
The results of statistical observations
Table 2 indicates a high value on net interest and overall income relative to income fluctuations. The volatility of earnings is substantially smaller than net profits and overall income because the volatility of earnings includes more market value elements than net income and full income of financial assets and liabilities. Successive improvement in net sales valuation and detailed revenue suggest that it provides details about the fair value importance of the liabilities and financial assets associated businesses. That means, mark size is much more volatile to business profits than net profit to date. Higher earnings would impact on a growing, weakening and dysfunctional state of the economy. Fig. 1 and Fig. 2 show the structures of the conceptual model as well as the first round of running the model. Also, Table 3 shows the results of convergent validity as well as composite reliability and the results confirm the validity of all variables.

![Fig. 1. The structure of the proposed study](image1)

![Fig. 2. The results of running the model](image2)

**Table 3**
The results of convergent validity and internal consistenct

<table>
<thead>
<tr>
<th>Variable</th>
<th>AVE</th>
<th>Information</th>
<th>Composite Reliability</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock Price</td>
<td>1.000</td>
<td>Valid</td>
<td>1.000</td>
<td>Valid</td>
</tr>
<tr>
<td>Earning Volatility</td>
<td>1.000</td>
<td>Valid</td>
<td>1.000</td>
<td>Valid</td>
</tr>
<tr>
<td>Net income</td>
<td>1.000</td>
<td>Valid</td>
<td>1.000</td>
<td>Valid</td>
</tr>
<tr>
<td>Comprehensive income</td>
<td>1.000</td>
<td>Valid</td>
<td>1.000</td>
<td>Valid</td>
</tr>
</tbody>
</table>

![Fig. 3. The results of final results](image3)

From the bootstrapping model above, the T-statistic value and Hypothesis Test are used to conclude. The T-table value, of 5 percent for 98 data, explains that if the T-static value exceeds the T-table of 1.666, the internal model will be significant.

**Table 4**
The results of path analysis

<table>
<thead>
<tr>
<th></th>
<th>Original Sample</th>
<th>Sample Mean</th>
<th>Standard Error</th>
<th>T- Statistic</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock price → Earning Volatility</td>
<td>0.029</td>
<td>0.042</td>
<td>0.088</td>
<td>0.336</td>
<td>0.737</td>
</tr>
<tr>
<td>Stock price → Net Income</td>
<td>-0.143</td>
<td>-0.140</td>
<td>0.036</td>
<td>3.935</td>
<td>0.000</td>
</tr>
<tr>
<td>Stock price → Comprehensive income</td>
<td>-0.143</td>
<td>-0.140</td>
<td>0.036</td>
<td>3.951</td>
<td>0.000</td>
</tr>
</tbody>
</table>
The original sample value in Table 4 is the latent influence coefficient of another latent variable. The sample value is the mid-value of the path coefficient in the mid-column (m). Otherwise, we will be able to see the standard deviation (stdev), and defects in the T-statistical mean sample showing the T-value for the hypothesis test. T-Statistics on the effect of stock price on earning volatility show a number 0.336 smaller than T- Table 1,666 with a probability value of 0.737 which is bigger than 5%, meaning that stock price has no a significant effect on earning volatility. T-Statistics on the effect of stock price on net income show a number 3,935 bigger than T- Table 1,666 with a probability value of 0.000 that is smaller than 5%, meaning that stock price has a significant positive effect on net income. And the last T-Statistics on the effect of stock price on comprehensive income show a number 3,951 bigger than T-Table 1,666 with a probability value of 0,000 that is smaller than 5%, meaning that stock price has a significant positive effect on comprehensive income.

5. Discussion

The hypothesis suggests that benefit influences the buying ability of individuals, so it also affects the company's value/acquisition price. High return adjustments will further decrease buying power and contribute to lower market values and lower potential dividends. The average equity prices for the financial market should then adjust. Volatility in profits does not change stock price favorably and dramatically. The findings revealed that uncertainty in earnings does not have an effect on inventory values. The coefficient suggests a favorable association between income fluctuations and stock price and to allow investors to use knowledge about volatility income to determine their stock price. Volatilization of earnings is a typical investment assumption. Based on the findings of this survey, Investors are most interested in high gains per share than in poor earnings per share stocks. The strong demand for profitable stocks brought the stock price of the firm up. On the other hand, low profits per share continues to reduce asset prices. The results of this analysis are not in line with his research findings (Rowena & Hendra, 2017a; Rusdiyanto & Narsa, 2019; Satriawan, 2017), which demonstrate that benefit uncertainty greatly affects the stock prices (Rusdiyanto & Narsa, 2019; Iatridis, 2015; Romli et al., 2017). Net sales affect the market price optimistic and dramatically. This means that investors can make fundamental analytical use of the net income value relevant at stock price equity book valuation because it has stock pricing knowledge. The result further enhances the belief that high-equity firms will draw buyers to purchase the company's shares. This optimistic coefficient proves that investors have a larger stake in higher net income firms and have been the fundamental knowledge in decision-making on investment. The study findings are consistent with his analysis results (Rusdiyanto & Narsa, 2019; Biddle & Choi, 2006; Mahlindian et al., 2017). Net Profits have greater effects on equity markets than fluctuations of income. Comprehensive profits do not change stock price favorably and substantially. This means that full revenue is not applicable to the inventory price. The coefficient shows that the net revenue has no positive relation to the stock price. Investor information on the company's stock price should be used comprehensively. For borrowers, high yields are a shared dream. Based on the findings of this survey, investors would be more involved in stocks with large income per share than stocks with low incomes per share. Investors' strong demand for high-profit inventories would raise stock prices of the firm. On the other hand, low profits per share continues to reduce asset prices (Sidantha et al., 2016; Rusdiyanto & Narsa, 2019; Trimono et al., 2017).

The findings of the variable control test indicate that the results of this analysis did not help the research results (Rinati, 2008; Anisma, 2012; Muflihah, 2017; Rusdiyanto & Narsa, 2019) because of the lack of significant and relevant net profit margin (NPM) stock (Rusdiyanto & Narsa, 2019). The results of the analysis do not correspond to other conclusions (Ardiansyah & Isbanah, 2017; Priana & Rm, 2017; Rusdiyanto & Narsa, 2019; Rosyadi & Anggraia, 2015; Septiawan, 2016).

6. Conclusion

The results of this study have proved that the share price had a significant effect on net income and comprehensive income but did not have any significant effect on profit volatility so that net and comprehensive profit had relevance to the share price and investors can make both variables in conducting further fundamental research. Previous studies (Asghar et al., 2011; Astuti, 2010; Black & Wiliam, 1998) measured the level of volatility of earnings, net income, and comprehensive income on the share price, but when trailing other approaches by causality, share prices affect net income and comprehensive income but not for profit volatility. In this study, however, the change includes detailed income variables due to Financial Accounting Standard No. 1, a shift in terms from profit and loss statements to systematic profit and loss statements.

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